

# Natural Rearing Newsletter ©

Volume 3 Issue 10

June/August 2000

## FOR THOSE THAT CHOOSE TO THINK FOR THEMSELVES

From The Desk Of: MARINA ZACHARIAS

### GMO In The News

There is a gigantic promotional campaign being launched, designed to convince you that genetically modified foods are safe and healthy. Mega-millions are going to be spent by the various powers that be, including several major grocery chains, in an all out media blitz.

Seems like those stubborn Europeans and Asians are not buying into the concept of these "miracle" foods like they should be so lets make sure that the people of the good ol' U.S. of A. don't start questioning what is contained in the food on the grocery store shelves. Heaven forbid that we have to start labeling this stuff. Just convince them that there is no difference and everything will be fine.

We already have about 60 to 70 percent of our foods in grocery stores that contain some genetically altered ingredients. It looks like the biotech corporations are looking to add even more in the foreseeable future—with or without the public's agreement.

At the present time we have about 30 engineered crops approved for sale in the United States. All are spliced with DNA of bacteria, viruses, and insect genes and antibiotic-resistant markers of one sort or another. So far, no one has even suggested a method for testing the long-term effects of GMOs in the food chain.

I've touched on some of this before but I think the time has come to offer you a few thoughts to offset the unbalanced viewpoint that the media is about to present. Now I can't be sure of all the points that will be hyped up but I can give you some of the more common ones that I expect. This may be controversial but I hope we are not the only ones that will provide some counterpoints for your consideration. After all, food is the very foundation for the health of both our animals and ourselves.

**Point:** Genetic Engineering is not new. It is just the same as speeded-up selective breeding.

**Counterpoint:** Genetic engineering and conventional breeding are worlds apart. Breeding does not manipulate genes; it involves crossing of selected parents of the same or closely related species. In contrast, GE involves extracting selected genes from one organism (e.g. animals, plants, insects, bacteria and or viruses), or synthesizing copies, and artificially inserting them into another completely different organism (e.g. food crops). GE usually employs virus genes to smuggle in and promote the inserted genes, and antibiotic resistant genes to act as markers. All these inserted genes are present in every cell of the "new" plant.

**Point:** Genetic engineering is precise.

**Counterpoint:** The function of only a small proportion of the DNA in higher organisms is known. Modern genetics has shown that genes do not operate in isolation. Rather, they interact in a complicated way, changing their behavior in response to influences from other genes. Although a gene can be cut out precisely from the DNA of an organism, its insertion into the DNA of another organism is entirely random. This results in the disruption of the order of the genes on the chromosome and may result in random and unexpected changes in the functioning of the cells.

Richard Lewontin, Professor of Genetics at Harvard University, has said of genetic engineering: "We have such a miserably poor understanding of how the organism develops from its DNA that I would be surprised if we don't get one rude shock after another".

**Point:** GE foods vary from non-GE foods only in the characteristic that has been modified.

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**Counterpoint:** The random insertion of foreign genes into the genetic material may cause unexpected changes in the functioning of other genes. Existing molecules may be manufactured in incorrect quantities, at the wrong times, or new molecules may be produced. GE foods may therefore contain unexpected toxins or allergenic molecules that could harm our health and the health of our animals. No one knows what the effects could be on our offspring.

**Point:** All GE food is extensively tested and the GE food at present on our supermarket shelves is perfectly safe to eat.

**Counterpoint:** Like our pet foods? Test for 8 weeks and if the test animals don't die it must be good, right? Oops. Sorry folks. That's another subject.

There are serious doubts about the adequacy of GE testing and about the validity of the conclusions drawn from the results. Independent long-term testing is required before we can be sure that GE food is safe to eat. There is also the concern that there may be a possible acceleration of the development of bacterial resistance to antibiotics directly due to the use of antibiotic resistant genes in the production of GE foods.

**Point:** Genetically engineered food has improved nutritional value.

**Counterpoint:** No GE foods produced to date have been shown to be more nutritious than non-GE food. Most GE crops are only designed to be resistant to specific herbicides, to produce their own insecticides or to have increased shelf life.

**Point:** One can always choose not to eat GE foods.

**Counterpoint:** At present, most foods on the supermarket shelf contain GE ingredients. These ingredients are not labeled so there is no way of knowing whether we are eating them. A recent movement was made to have GE foods labeled but it was rejected by the powers that be. The reasoning given was that this might "unnecessarily" alarm the American public.

**Point:** Farmers will benefit from growing GE crops.

**Counterpoint:** This is grossly misleading. Seeds of genetically engineered crops are more expensive than those of conventional crops. Farmers in the United Kingdom and the United States report that yields are generally no better, and the crops are less reliable and less profitable. Non-GE crops now receive a premium, and as more countries reject GE foods, the opportunities to sell GE crops are diminishing. Because of risks associated with GE crops, insurance companies are reluctant to insure them.

Farmers growing GE crops have to sign binding contracts with the biotechnology producers. These commit the farmer to using only the herbicides produced by the company and prohibit the farmer from the traditional practice of saving seed for the next season.

How does this benefit the farmer? (2)

**Point:** GE crops will reduce the use of herbicides and pesticides.

**Counterpoint:** Crops engineered to be resistant to specific herbicides may encourage more liberal use of those herbicides. If a farmer has a problem with weeds he is inclined to use more herbicides if he knows they will not harm the crop itself.

In areas of the United States where crops engineered to produce their own insecticide are grown, pesticide use has not decreased.

**Point:** There is no evidence that GE crops are harmful to the environment.

**Counterpoint:** Insects, birds and the wind carry genetically altered pollen and seeds into neighboring fields and far beyond. Cross-pollination occurs between GE crops and non-GE crops and their wild relatives. Here's a thought for you. What happens if a "weed killer resistant" crop transmits its characteristics to weeds?

From a previous article you already know that crops engineered to produce their own insecticide can kill beneficial insects (i.e. the case of the Monarch Butterfly).

**Point:** GE crops will save the world from famine.

**Counterpoint:** Only if they start giving it away. The major cause of famine is the unequal global distribution of food. Mountains of food exist in much of the Western world and food is regularly dumped or destroyed. Poor people have limited ability to buy either GE or non-GE food. There is no evidence that GE crops produce higher yields or that GE products will be cheaper.

**Point:** You can trust the scientists that say GE food is good for you and the world.

**Counterpoint:** The money for scientific research on GE comes from either the biotechnology companies or the government. Both are committed to the promise of biotechnology. This means that even when scientists have concerns about the safety or commercial application of the technology, it is often hard for them to risk their careers by being openly critical. For example, one respected scientist in the United Kingdom who spoke up about his experimental results showing the damaging effects of feeding rats a type of genetically engineered potato was immediately fired from his job.

**Point:** You can't stop progress.

**Counterpoint:** Progress implies change for the better. Change for the worse is regression. We must be sure that GE products have benefits for the consumer and are safe if they are introduced into our foods. We must not commit ourselves willingly or unwillingly, to a dubious technology that cannot be reversed.

**Summary:** For now the only practical alternative we have is to buy only certified organic foods. Don't let the "spinmeisters" with their megabuck campaign convince you that all foods are the same.

## **Fluoridation**

### **A Class Action Law Suit Waiting To Happen**

A couple of years ago we wrote a brief article on fluoride. At that time, the FDA forced the toothpaste manufacturers to include in their labeling "Warning: Keep out of reach of children under six years of age. If you accidentally swallow more than used for brushing, seek professional assistance or contact a Poison Control center immediately".

The recent decision against the tobacco companies for perpetrating the "big lie" and failing to warn the public of the dangers of smoking, makes me wonder if fluoridation might be the next target. After all, more people brush their teeth and drink fluoridated water than all the people that smoke. All the lawyers need is someone with deep pockets to go after and some scientific proof that they failed to warn the people of an existing danger. Both factors exist with respect to fluoride!

Consider whom all they could go after:

- ◆ American Dental Association
- ◆ United States Public Health Service
- ◆ Dentists, pediatricians and other health care professionals who prescribe fluoride supplements
- ◆ Fluoride toothpaste manufacturers
- ◆ Communities and townships fluoridating drinking water
- ◆ Manufacturers of foods and beverages containing fluorides (example: In one analysis, Coke Classic was found to have 2.56 ppm).

I could go on and on, but you get the idea. But could the lawyers find just cause? That should be an easy one. Dental fluorosis is the most visible of the adverse effects of fluoride ingestion. The defense will claim that this is just a cosmetic effect but this could be ripped apart by expert testimony from toxicologists, physiologists etc. There is certainly a very large body of reputable research documenting the harmful effects of fluoride far beyond just fluorosis, but this one factor alone would be sufficient to prove the case.

Are there any other harmful effects they could point to and document? Certainly! As mentioned in our previous article, Drs. Burk and Yiamouyannis in an extensive study, linked approximately 10,000 excess cancer deaths per year directly to water fluoridation. These findings were the subject of full-scale United States Congressional Hearings. Of course the US Public Health Service, co-promoter of fluoridation with the American Dental Association opposed the findings and tried to refute the two scientists with its own report.

When Drs. Burk and Yiamouyannis evaluated the USPHS findings, they demonstrated to Congress that the Service had made mathematical errors by leaving out 80-90% of the recorded data. When these errors were corrected, the USPHS own data confirmed the figure of 10,000 excess cancer deaths per year! All the findings from both studies going back twenty-five years clearly point to water fluoridation as a cause for cancer.

But there's more. Much more.

The following are results released in 1990 by the National Toxicology Program under the auspices of the US Public Health Service:

- ◆ Pre-cancerous changes occur in human oral squamous cells as a result of elevating the levels of fluoride in drinking water.
- ◆ There is an increase in the incidence of tumors and cancers in oral squamous cells as a result of increasing levels of fluoride in the drinking water.
- ◆ Osteosarcoma, a rare form of bone cancer, occurs only in animals with fluoride in their drinking water.
- ◆ There is an increase in the incidence of thyroid follicular cell tumors as a result of increasing levels of fluoride in the drinking water.
- ◆ Hepatocarcinoma, a rare form of liver cancer, occurs in animals with fluoride in their drinking water.
- ◆ The doses of fluoride that are linked to cancer in this study are only one tenth to one fiftieth of the amount used to produce cancer by benzene. Thus, fluoride is up to fifty times more carcinogenic than benzene.
- ◆ The cancer-causing potential of fluoride is not limited to one type of cancer.

The Department of Health and Human Services gathered a massive amount of evidence for its own 1991 report, "Review of Fluoride Benefits and Risks". This report supports the link between drinking and bathing in fluoridated water and the creation of human cancers.

In December 1992, the New Jersey Department of Environmental Protection and Energy and the New Jersey Department of Health released their joint study. The findings were that bone cancer rates among ten-to-nineteen year old males living in all New Jersey municipalities having fluoridated drinking water were 6.9 times higher than in other areas of the state.

There is more on cancer but I want to move on to other proven problems.

A large number of studies both from here and abroad, show that fluoride can and does penetrate the blood-brain barrier. By penetrating the brains first line of defense against toxins, fluoride has been linked to several adverse effects on the brain and central nervous system.

It causes motor dysfunction, IQ deficits, and/or learning disabilities. It may be responsible for various brain syndromes such as senile dementia, schizophrenia and Alzheimer's disease. A study from China indicates that the influence of a high fluoride environment on the intelligence of children may occur early in development, such as during the embryonic stage of life. (i.e. From mother drinking fluoride water during pregnancy.)

Lest you think that this is just some obscure research done by some unknown group let me point out that these same findings were indicated by a joint scientific study conducted by Harvard Medical School, Eastman Dental Center, Iowa State University, and Forsyth Research Institute.

Another area of concern is that fluoride ingestion causes increased production of imperfect collagen not just in teeth but throughout the body. The body's structural components that should not become mineralized such as ligaments, cartilage, and tendons turn into hardened tissue. It also affects the structure and strength of bone by causing fused vertebrae, calcified joints, arthritis and an increase in fractures. It decreases the bone's ability to heal.

While fluoride ingestion tends to stimulate bone density, the bone is structurally unsound. Restoration of bone mass by use of fluoride not only fails to reduce the risk of fractures it actually increases the risk by a significant factor.

Only one ppm fluoride in drinking water disrupts collagen metabolism. Further, one part per million fluoride in drinking water (or other ingested solvents such as diet cola drinks) cuts the activity of the DNA repair enzyme by 50% resulting in increased genetic damage. (The US Environmental Protection Agency allows 4ppm fluoride in our drinking water.)

Now here's a little bombshell for you. **Fluoride is not essential for sound teeth and it does not prevent cavities.** A 1971 review of numerous studies concerning the nutritional value of fluoride, performed by the US National Academy of Sciences, found no evidence to support the claim that fluoride is an essential mineral. Further, both the US Center for Disease Control and Prevention in Atlanta GA. and the British Ministry of Health admit that no laboratory or epidemiological study supports the claim that adding fluoride to the drinking water prevents tooth decay.

The latest data from the National Institute of Dental Research found no difference in the incidence of tooth decay in children ages five through seventeen years raised in non-fluoridated, partially fluoridated and fluoridated communities. NIDR studies show no relationship between fluoridation and tooth decay rates.

In the USA we are inundated with fluoride not only from our drinking water but also from toothpaste, oral rinses, prescribed dental treatments, soft drinks, baked goods, beer, wine, fruit juices made from concentrates and even some food supplements. Some of our produce is grown with fluoride-containing fertilizers and contain six to twelve times more fluoride than produce grown without these fertilizers. There is virtually no way of knowing just how much fluoride we are ingesting on a daily basis.

So why do we continue to be hammered with the so-called "benefits" of adding fluoride to our water? Ah, that's an interesting question and the answer can be found in following the "big money" trail. It certainly isn't for our health! It doesn't take much research to uncover the almost unbelievable story on how this all started and now with the newly declassified documents obtained under the freedom of information act, the lawyers could have a field day with this kind of ammunition.

Canada's primary promoter of fluoridation has done an abrupt about face upon discovering the real research on fluoride that started this whole mess. Dr. Hardy Limeback, (4)

BSc, PhD in Biochemistry, head of the Preventive Dentistry Department of the University of Toronto, and President of the Canadian Association for Dental Research, recently stunned the Canadian community with his outspoken comments:

- ◆ Children under age three should never use fluoridated toothpaste or drink fluoridated water. Their baby formula should never be made with fluoridated water.
- ◆ For more than 50 years we have been dumping contaminated fluoride into water supplies. Most comes from the smokestack scrubbers used by the super-phosphate fertilizer industry. The fluoride additives from industry contain toxic lead, arsenic, and radium, all of which cause cancer.
- ◆ The accumulated effects on human health of such toxins are catastrophic.
- ◆ Fluoride ends up in your bones and can actually change the human bone architecture. This is called skeletal fluorosis and the first signs are mottled and brittle teeth. Dentists are now spending more time treating dental fluorosis than cavities.
- ◆ Vancouver, which has never fluoridated, has a lower cavity rate than Toronto, which has been fluoridating for over 35 years.
- ◆ The Centers for Disease Control and your dental association and dentists base their position on research that is 50 years old. Your well intentioned dentist is simply following **50 years of misinformation** from public health groups and his own dental association.
- ◆ The author of much of this information admits unintentionally misleading his own colleagues and students because he refused to study the toxicology data that is available to anyone. After 50 years of delusion, the Dental and Public Health Associations continue to manipulate public opinion in favor of fluoridation.

In 1996 headlines were made in England (including the London Time) when Colgate-Palmolive Corp. paid out the equivalent of US\$2,000 to the parents of a ten-year-old British child for fluoride damage to his teeth. The company called it a "goodwill" payment after an independent specialist diagnosed the boy as having developed dental fluorosis from swallowing small amounts of fluoride over a period of time.

In the USA it only requires one person to file a class action suit on behalf of everyone who has suffered injury from a product or action. Is it just a matter of time before someone starts the ball rolling?

### Puppy Pie Recipe

Take one puppy, roll and play until lightly pampered, then add the following ingredients:

- 1 cup patience
  - 1 cup understanding
  - 1 pinch correction
  - 1 cup hard work
  - 2 cups praise and 1 ½ cups fun---blend well
- Heat with warmth of your heart until raised or until puppy has doubled in size.
- Mix with owner until consistency is such that owner and puppy are one.

## BioSET and ENERGY MEDICINE UPDATE

As most of you know I have maintained for a long time that we need to get away from assembly line medicine and approach health care on an individualized basis. Relatively recent developments have provided us with new tools that allow us to pinpoint the specific needs of an individual body rather than using a "shotgun" method of treating problems.

The utilization of Meridian Stress Analysis (MSA) is the heart of the BioSET program and is proving to be an indispensable part of holistic health care for all. A little later in this article I will tell you about an independent study of the proven cost savings in a health care plan and the improved health of the participants. The results will probably shock the "orthodox" community but I'm hoping that more health care plans will look at it a lot more closely. It is exciting to hear of the growing usage of this type of energy medicine and the success that practitioners are having.

In my own experience, I've seen case after case that could not be treated in the past with herbs, homeopathy, etc., that responded to the BioSET techniques. I've had cases of both people and animals that had irritable bowel so extreme that no type of food, medicine or holistic treatment could be given without their bodies severely reacting. These seemingly hopeless cases after completing the full BioSET program are now able to eat foods and live normal lives without fear of the former adverse reactions.

It has such broad applications. For instance, I had a case where a dog went in for minor surgery in which the shaved surgical sites would not grow hair back. (For you homeopaths out there, the dog had received Nux Vomica after surgery for detoxification without any resulting hair growth.) Within a short time the skin became black and sun damaged. BioSET was started approximately three months after the surgery. Within two weeks, hair began to grow! Within the next two months the skin and coat were completely back to normal !! The treatment was able to rebalance the energy flow in the body and allow it to heal. I know from previous experience with cases like this that when just supplements were tried, the results were often very slow and disappointing.

I have also seen several cases of autoimmune disorders completely cured, particularly hemolytic anemia. Of course, initially veterinary medications and supplements are always needed to first stabilize the case. After completing the BioSET program, these are no longer required. The technique is especially effective in taking the guesswork out of the weaning process from such serious drugs as prednisone. Often people are too over zealous in their attempts to wean off drugs and can cause serious setbacks. With the MSA unit we can test the body for the amounts needed to maintain balances and thus avoid such setbacks.

Recently, I learned of a health care study done by ICON Health & Fitness Inc. using MSA. They are the world's largest manufacturer of home-exercise equipment and operate a self funded medical plan for their staff of over 4,000 employees. (5)

They wanted to find out the effectiveness of using this system for improving employee health and saving money for the corporate health-care plan. Their focus was on the very practical outlook of results of treatment rather than what the treatment is and how it works. The study ran for one year and included 70 participants that were carefully tracked.

From strictly a financial point of view the study was a resounding success. Gross hard-dollar savings in reduced medical and prescription expenses came to \$1,393 per participant. Increased productivity and reduced sick leave amounted to \$2,485 per participant. For the 70 participants the total savings were approximately \$200,000 for the year!

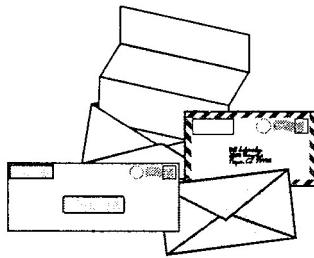
As impressive as the dollar savings were, I was more intrigued by the individual results achieved by the participants. Here are a few examples:

- ◆ Matt, age 66, suffered from hip pain and back pain and had a pinched nerve. After treatment he commented "I feel great. I can stand up straight for the first time in 18 months. This has improved the quality of my life. Doctors have not been able to help me."
- ◆ Sam, age 3 and Karl, Age 1, were both considered to have ADD/ADHD. Their parents were asking for Ritalin. MSA testing showed that the children might have a sensitivity to food dyes. When the boy's parents changed their diets, they were no longer hyperactive. The two doctors that had treated them earlier couldn't find anything wrong with them.
- ◆ Susan, age 31, suffered chronic hip pain. She'd had 12 to 15 visits to a chiropractor without success; then she was referred to a specialist who charged \$600 per test. MSA results indicated that she had allergies. Two months after treatment, she felt no hip pain.
- ◆ Jess, age 34, had been on Claritin for two years. Three months after treatment there was no longer a need for Claritin.
- ◆ John, age 28, was an asthma patient and used an inhaler three to four times a day. He had made several visits to the emergency room in the past year for breathing problems. After MSA treatment, he uses an inhaler once a month and hasn't been to the emergency room for breathing problems in the past six months.

Because of the savings, health improvements, and employee satisfaction resulting from the study, ICON is in the process of adding MSA to its medical plan as a standard benefit.

The MSA unit is at the forefront of energy medicine technology that is continually developing. The BioSET technique can't cure everything but it certainly gives us a strong tool in individualizing the correct treatment needed for a patient. The success that I and obviously others are having is very exciting and hopefully we will soon see an explosion in the utilization of energy medicine throughout the nation.

## MAILBOX



Dateline August, 2000

Dear Marina,

I just lost a young male Corgi to surgery attempting to relieve a bone lodged in his intestines. It was the end of a raw chicken bone. I have been feeding raw chicken legs, necks and wings for two years now and he had never had any apparent problem. The surgeon said there were a number of undigested chicken bones in his GI tract and evidence of scarring.

On my other dogs, on a number of occasions I do find undigested bone pieces in their stools and needless to say, I am now very worried about them all having a potential problem with obstructions or perforations.

I feed raw meaty chicken bones in the morning and at night they get their regular raw food. My main concern right now is what to do about the raw chicken bones that I feed in the morning. Do you have any suggestions?

Needless to say, when I received this letter I was very disturbed. I have had major concerns with those high bone diets since the beginning.

I have heard of far too many cases like this resulting from incorrect feeding of bones. **Meaty bones should not be fed on an empty stomach!**

The fact that chicken bones are approximately the same size as a rabbit does not mean that they are equivalent to a dog in the wild catching and eating a rabbit.

I want to emphasize this in a little more detail. If a dog in the wild is fortunate enough to catch a rabbit, what does it do? Well, first he will eat the stomach contents. This is where he will get his semi-digested grain and cellulose matter (**yes I said grain!**). Next he will tear at the muscle meat. Along with this will come hair which will act as roughage. Then finally he will eat the bones. So now he has a well-protected stomach and intestinal tract before the bones are eaten.

(6)

Now I know people think that the meat on a chicken wing or back would appear significant but it is not. Bones can be an important part of the diet, however they can also pose a serious health risk if they are fed inappropriately.

Please use common sense when feeding your animal. If they have had any history of digestive problems (i.e. vomiting, gas, burping, bloating, mucousy stools, diarrhea, weight problems, etc.) seriously reconsider the use of bones in the diet.

If they are older and have never had raw meat before, please use extreme caution when introducing these foods. Again, whole bones should not be the first introducing food for these animals!

Case in point, a nine-year-old Rottweiler was given half a roasting chicken for the first time. She ate it with great gusto and so the owner decided to give her the other half. Result—serious pancreatitis that took a week of hospitalization to recover.

With older animals, introduce meat slowly and then other foods to see how healthy your pet's digestive system really is.

One last point. Bones and meat should not be fed every day. No animal would successfully get meat every day in the wild. The body needs a rest.

I will admit that the "bone" diet idea has brought many newcomers to raw food feeding and this is a good thing. But please, let's all use a little caution and a lot of common sense when it comes to this diet.

Dear Marina,

I want to thank you from the bottom of my heart for recommending the Caulophyllum 1m for my Pomeranian bitch that had previously lost two litters due to inability to whelp large puppies quickly enough.

Before breeding her this time, I put her on Pregnancy Formula and some other whelping herbs. She whelped two large pups with no difficulty. After the presentation of the head of the third pup, her contractions stopped for about 15 minutes and I was sure I would lose the pup. I decided to try a dose of Caulophyllum you sent me since I had nothing to lose. I was surprised when about 5 minutes later, she had two heavy contractions that pushed the pup right out! I was even more amazed when I saw that puppy move!

The vet could hardly believe that she had free-whelped three puppies over 5 ounces each. Thank you, thank you, thank you.

Anyone want to try to tell me homeopathy doesn't work?

## Earth Dragon

One of the fun things about being involved with holistic health care is learning about some unusual products that are currently being used in other parts of the world. Here is some background information on an item that was recently introduced to the USA market

In China, Korea, Vietnam and most of Southeast Asia, earthworms (or lumbricus) have been used for their therapeutic benefits for thousands of years. They are commonly referred to as "Earth Dragons".

In Korea, it has been a longstanding tradition to have a bowl of "earthworm soup" before going to bed. It is believed to promote general health and prevent a wide variety of diseases. On any given evening in Korea, one can find a bowl of earthworm soup in just about any restaurant.

In Vietnam, the earthworm is a principle ingredient in the traditional Vietnamese remedy known as "Miracle Medicine that can Save Lives in 60 Minutes". The benefits of this formulation are expected to occur within one hour. Dr. Do Tat Loi, M.D., Ph.D. (a well-known author and long standing Director of the Hanoi National Institute of Pharmaceuticals in Vietnam) has written extensively about the health benefits of earthworms.

Also, Dr. Ba X. Hoang, M.D., PhD., (who comes from three generations of doctors integrating Western and Chinese medicine) states that there have been several clinical trials in Vietnam demonstrating the safety and effectiveness of the earthworm for supporting immunity and cardiovascular health conditions.

Because it originates from soil, the earthworm has a dense nutritional content, as well as oxygen-enhancing, and anti-oxidant properties. For these reasons it has also been used for supporting joint health. External use of the earthworm has proven to be effective for promoting healthy skin.

According to Dr. Ba, the most beneficial property of the earthworm is its liver calming action. He feels that the liver plays a central role in human health and disease.

To quote him: "We combine the earthworm, which is cooling in nature with acorus, an herb that has very similar properties, but is warming, to make a natural supplement compound that not only supports the liver, but releases liver congestion, reverses functional hypoxia (lack of cellular oxygen), and enhances the antioxidant and detoxification functions of the liver to help combat and prevent the many liver-related problems that we see occur as a result of the industrialized world."

From the information I have on "Earth Dragon" it appears to be an excellent addition to our supplemental armament for use in helping with various liver problems.

## Bio Nutritional Analysis (BNA)

In a previous newsletter we mentioned a process for examining bloodwork called "Metabolic Nutritional Analysis"—now known as Bio Nutritional Analysis or BNA for short. The technique has been sold to a major laboratory and is currently being marketed to the veterinarian community. I hope I'm wrong, but I can see some major problems with the way this is being handled.

Let me back up a little and give you a brief description of what is being said about the process: "The purpose of a nutritional analysis is to identify which physiologic parameters or blood test results deviate from the midpoint of a reference range for dogs or cats. These markers include measures of organ function, mineral levels, hormone assays, and enzyme activities. Organs that are under stress or diseased are identified, and a therapeutic plan is developed to address all the imbalances, excesses or deficiencies, simultaneously. Our goal is to promote healing and return the body to normal function, i.e. to restore good health in our patients."

Sounds impressive doesn't it. Well I thought so too and have used it in my practice for over eight years. It has been a great tool. However, over that time we certainly learned quickly that you needed to refine the process for each individual case or you can easily end up with 20 or more supplements the poor animal needed to take at one time! (Not to mention the poor owners pocketbook.)

I believe the general principle of BNA is correct. By balancing the body the ailments will be taken care of by the body's own healing mechanisms. However, the serious shortcoming is that many times the body cannot respond on all levels to supplements only. You can manage them and a good percentage of cases would improve but you would not change the underlying reasons of why the condition occurred in the first place.

Allergy cases in particular did not respond well to BNA. I also found from practical experience that extremely sensitive patients that react with diarrhea to most supplements did not do well with the BNA protocol alone.

Now please don't get me wrong. I still use BNA and it is a very useful tool that can help guide us as to what the body may need. However, I have some serious reservations with respect to how this is currently being marketed by commercial interests. The downfall here is that it relegates a useful tool into a "cookbook" style of medicine with total disregard for individual circumstances.

The laboratory that is pushing BNA has set up "standard" parameters in analyzing bloodwork. So if such and such is low, give A,B,C. If so and so is high, use X,Y,Z, and so on. I truly have seen recommendations for patients come back with 10 or more homeopathics and 6 to 8 vitamins plus another 6 to 8 glandulars without any regards for the individual patient!

Obviously this is not addressing the underlying conditions of why these imbalances are there in the first place. I wish it were that simple, I really do. It would be great to say that if the bloodwork indicates that these levels are off, give these numerous items and all will be cured. It just doesn't work that way!

I am already hearing from several breeders whose vet's are just getting their feet wet in holistic medicine and in some cases vets that have been around for a long time in the holistic field, starting to use the BNA technique from this veterinarian lab. In my opinion the costs for this are outrageous, ranging from \$200 to \$500 for the Bio Nutritional Analyses alone plus the cost of all the supplements. If the vet decides that a follow up should be done to determine the progress, there is the same charge again for the BNA and commonly a new set of supplement recommendations to contend with.

What will the reaction be when they find that this is not the "be-all, cure-all" that they were led to believe? How will the vet and the client feel when they see poor or no results from the utilization of BNA alone with serious allergy cases? I fear that in the coming years we may experience a serious backlash that will reflect poorly on the entire holistic veterinary community. I can foresee veterinarians trying to deal with what is considered to be a "hopeless" case in orthodox terms deciding to try BNA to determine if this "holistic stuff" has any merit. If it doesn't work out satisfactorily you can guess what the attitude will be in the future towards holistic medicine.

I have no doubt that there will be cases where the animal will show positive improvement. After all, the underlying principles are to provide nutrition to the body to help heal. In many cases this boost, relative to what the animal was formerly receiving, will show results. I also have very little doubt that these cases will be "hyped" out of proportion by the commercial interests involved in promoting BNA.

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#### Parasitic Worm Treatment for Inflammatory Bowel Disease

All across the country countless numbers of people de-worm their pets on a regular basis whether or not they need it. They commonly believe that it can't do any harm. New research would indicate that this may not be true.

Professor Joel Weinstock and colleagues at the University of Iowa Recently performed a small animal and human study that could very well result in utilizing a parasitic worm as an effective treatment for inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. The underlying cause for these problems is believed to be an overactive immune response to normal intestinal bacteria.

The digestive tract has a very complex and delicate ecosystem that may include as many as 200 to 300 species of bacteria, viruses and parasites. Certain microorganisms play a key role in modulating intestinal immunity..

This immunity is predominantly made up of two types of cells: TH1, which induces the inflammatory response, and TH2, which neutralizes it. Although the operating mechanism is not known, many parasitic infections induce production of TH2.

As a survival mechanism, parasites automatically suppress the immune system in an attempt to avoid elimination by their host. It is believed that certain types of parasites suppress the immune system only slightly—just enough to pull the immune system away from autoimmunity. Dr. Weinstock feels that without these parasites, our immune systems are left unchecked and are much more likely to overreact and produce powerful inflammatory agents such as gamma-interferon, which initiates heightened macrophage activity.

Dr. Weinstock and colleagues initially infected mice with intestinal parasitic worms known as "helminths". This study revealed that the infected mice were less likely to develop inflammatory bowel disease.

The research team went on to perform their first human study. Six patients were chosen with inflammatory bowel disease that had not responded to conventional treatments such as steroids and other immune-suppressing drugs.

They gave each patient a drink containing microscopic eggs of a specific species of intestinal parasitic worm that was capable of growing to about one-half inch in length. However, these worms were not capable of reproducing and are eliminated within a few months.

All 6 patients experienced symptomatic improvement and five out of six patients eventually experienced complete remissions. There were no side effects reported and the benefits of just one dose lasted between one and five months.

Due to the overwhelming success of their first trial, the research team is planning a larger, double-blind study in an attempt to prove the viability of wide spread application.

It's interesting to note that the incidence of inflammatory bowel disease is rare in underdeveloped countries where parasitic infection is high. In contrast, the incidence of such diseases is higher in industrialized countries, where the incidence of parasitic infection is much lower.

With the number of inflammatory bowel disease cases I have seen in animals over the years, I can't help but wonder if continual de-worming (i.e. monthly heartworm plus other wormers) of pets might not be a contributing factor.